US 301 Project Development







Delaware Department of Transportation Administration



Federal Highway

Middletown Corridor Coalition May 16, 2007





Agenda

- Introductions
- Project Purpose and Need
- Options Evaluated
- Responses to Coalition Questions
- Path Forward/Schedule 2007
- Funding Status
- Next Steps



Project Purpose and Need

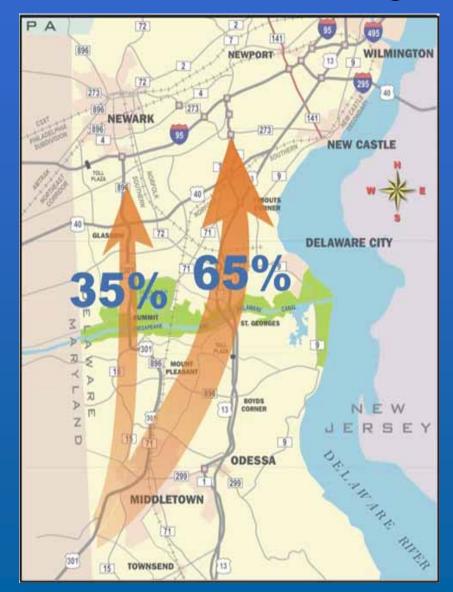
The US 301 Project Development effort has focused on meeting three basic goals and objectives:

- Address roadway congestion in the US 301 corridor and greater Middletown area by providing needed roadway capacity improvements to accommodate current and projected design year (2030) traffic demands;
- Address safety needs in the US 301 and SR 896 corridors, which have experienced a large number of fatal accidents over the past several years, at locations such as the sharp curve at the south end of Summit Bridge, among others; and
- Manage truck traffic, by separating local traffic from US 301 through traffic, especially the high volumes of through trucks on US 301 and Boyds Corner Road/SR 896



High Traffic Demand — Summit Bridge

- Traffic projections show that regardless of the alternative, including the Coalition's suggested Green North without the recommended Spur Road, there is a consistently high traffic demand to use Summit Bridge.
- The projected volumes generally agree with the findings of the U.S. 301 Origin / Destination Postcard Survey, which found that roughly one-third of the canal crossing traffic is heading to destinations due north and is more likely to use the Summit Bridge than the SR 1 or US 13 Bridges.





Recent Crash History

- In the 7 ½ years between January 1999 and May 2006, there have been 776 crashes on US 301, SR 896, SR 299, and SR 15, in the project area, south of the canal.
 - Approximately 36% of these crashes have resulted in injuries, including fourteen fatalities.
 - Thirteen of the fourteen fatalities occurred in the SR 896/US 301 corridor
- More recently, in March 2007, four people were killed in two separate collisions on US 301 near the state line.
 Both of these fatal crashes involved 18-wheelers.
- Crashes have been occurring on several segments of US 301, SR 299, and SR 15 at rates that are higher than the statewide average.



Three Potential Options Evaluated

The Project Team has evaluated three potential options with respect to the elimination of the Spur Road from the Green and Purple Alternatives:

- > Option A: Eliminate Spur Road No Other Improvements
- > Option B: Eliminate Spur Road -
 - Widen existing US 301 from 2-lanes to 4-lanes plus turning lanes from Peterson Road to north of Armstrong Corner Road,
 - Widen existing US 301 from 2-lanes to 4-lanes plus turning lanes or median from north of Armstrong Corner Road to Mount Pleasant (Boyds Corner Road/SR 896), and
 - Utilize existing US 301 (4-lanes + turning lanes or narrow median) from Mount Pleasant (Boyds Corner Road/SR 896) to Summit Bridge.
- > Option C: Provide limited access Spur Road along existing US 301 from north of Armstrong Corner Road to Summit Bridge.



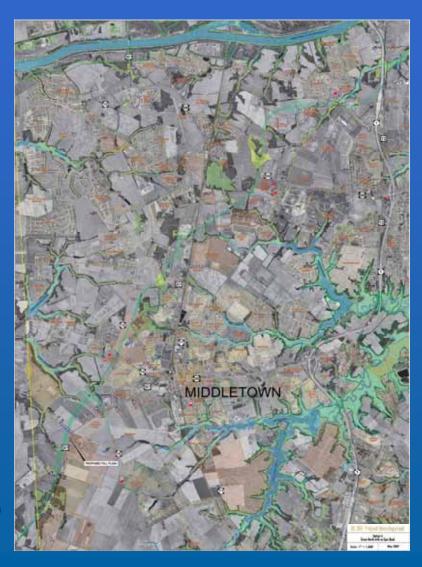
Option A: Eliminate the Spur Road - No Other Improvements

Does Not Meet Purpose & Need

 Eliminating the Spur Road would not fully meet the goal of separating local and through traffic, especially truck traffic in the Middletown area, since local and through traffic would be mixed on existing US 301, from the proposed interchange between new and existing US 301, north of Armstrong Corner Road to Summit Bridge, including the Mount Pleasant intersection (Boyds Corner Road/SR 896).

Increased Accidents

- Statewide accident data indicates that the average accident rate on two-lane principal arterial roadways, such as the segment of US 301 between Middletown and Boyds Corner Road, is over 50 percent greater than the average accident rate on divided rural principal arterial roadways, such as the proposed limited access, two-lane Spur Road.
- The Spur Road is projected to reduce the overall number of accidents and the overall accident rate in the study area, compared to an option without a Spur Road.

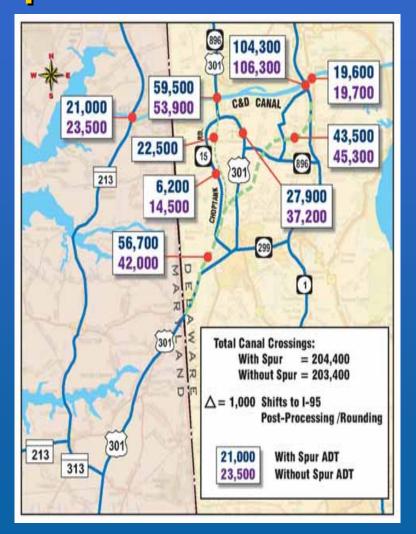




Option A: Eliminate the Spur Road -No Other Improvements

- Increased Traffic Choptank Road
 Simply deleting the Spur Road is projected to result in a significantly higher volume of traffic on Choptank Road (14,500 vehicles per day in design year 2030 vs. 6,200 vehicles per day), with the Spur Road.
- Choptank Road currently carries about 5,400 vehicles per day, on the section north of Churchtown Road.

Increased Traffic — Churchtown Road *Note*: Churchtown Road currently carries 2,700 vehicles per day, which is projected to increase to 3,700 for Green North + Spur Road and to 4,200 for **Green North without the Spur** Road.





Estimated Crash Likelihood

 Estimates were made of the number of crashes that may occur on the key roads in the study area under each design alternative in 2030:

Alternative	Estimated # of Crashes (2030)	Reduction vs. No-Build	Area-Wide Crash Rate/MVM
No Build	344		1.40
Yellow	318	-26	1.25
Purple	258	-86	1.23
Brown	259	-85	1.15
Green + Spur	248	-96	1.20
Green No spur	300	-45	1.25

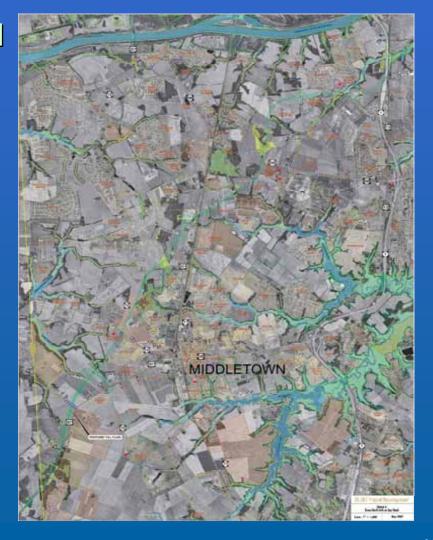
- The greatest reduction on estimated crashes is associated with the Green + Spur Alternative,
- Compared to the Green + Spur Alternative, the Green without Spur Alternative is estimated to result in roughly fifty more crashes per year.



Option A: Eliminate the Spur Road - No Other Improvements

Need to Improve Existing US 301

 The "No Spur Road" option would result in failing traffic conditions along existing US 301 from Peterson Road to Mount Pleasant (SR 896/Boyds Corner Road).

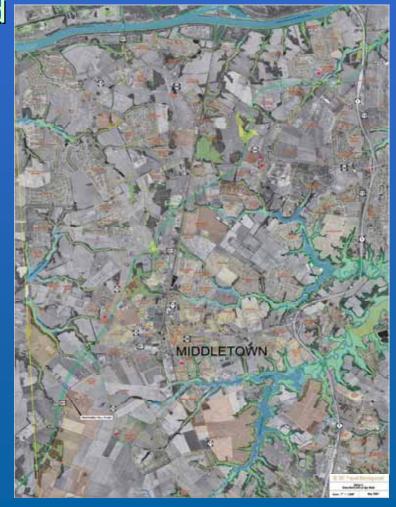




Option A: Eliminate the Spur Road - No Other Improvements

Does Not Meet Purpose & Need

In summary, the Department does not consider simply deleting the Spur Road as a prudent alternative, since it does not meet project Purpose and Need of improved traffic operations and safety and the management of truck traffic.

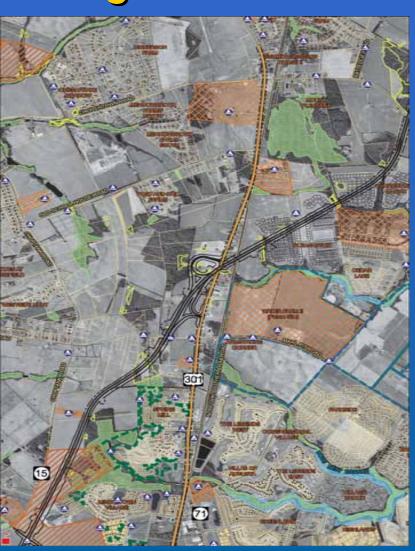




Option B: Eliminate Spur Road Improve Existing US 301

Descriptions

- Widen existing US 301 from 2-lanes to 4-lanes plus turning lanes from Peterson Road to north of Armstrong Corner Road,
- Widen existing US 301 from 2-lanes to 4-lanes plus turning lanes and median from north of Armstrong Corner Road to Mount Pleasant (Boyds Corner Road/SR 896),
- Utilize existing US 301 (4-lanes + turning lanes or narrow median) from Mount Pleasant (Boyds Corner Road/SR 896) to Summit Bridge, and
- Improve the sharp curve at the southern end of Summit Bridge, including removal of the existing intersection on that curve.





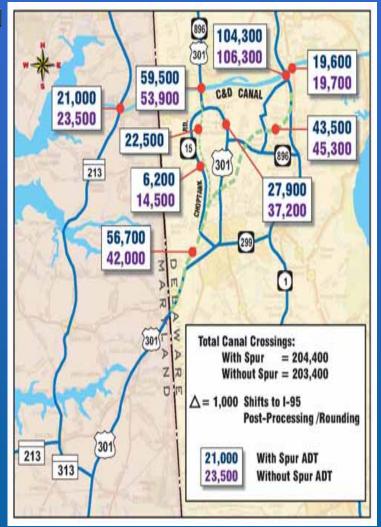
Option B: Eliminate Spur Road Improve Existing US 301

Increased Traffic – US 301 & Choptank Road

- The highest volumes on new US 301 occur on the segment between the Levels Road interchange and new US 301/Spur Road split.
- This segment of new US 301 is projected to carry approximately 56,700 vehicles in 2030 with the Spur Road and 42,000 (26% less) without the Spur Road, a difference of about 15,000 vehicles per day.
- Without the Spur Road, these 15,000 vehicles would use alternate routes, including existing US 301 and Choptank Road.

Increased Accidents

A large volume of traffic on an undivided, two-lane roadway (Choptank Road) would have a higher overall accident rate and number of accidents compared to a large volume of traffic on a limited access, divided highway (recommended Spur Road).



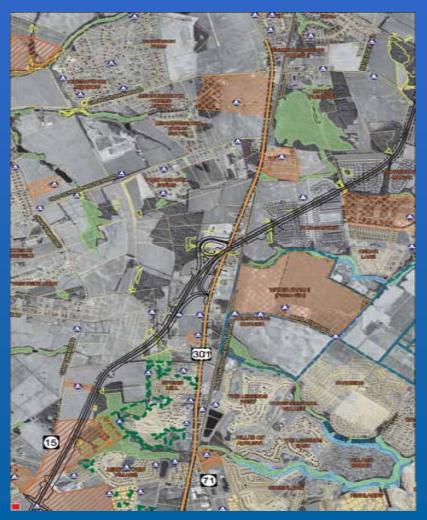


Option B: Eliminate Spur Road **Improve Existing US 301**

Existing US 301 Improvements
Without a Spur road, the diversion of traffic from the **Levels Road Ramps to** existing US 301 results in the need to widen existing **US 301 from Peterson Road** to Mount Pleasant (SR 896/Boyds Corner Road).

Cost of Improvements

The cost to widen existing US 301 from Peterson Road to Mount Pleasant (SR 896/Boyds Corner Road) would be approximately \$55 to \$65 million. This widening would result in significant property impacts along existing US 301, much of which is developed.





Option B Property Impacts

- Partial Impacts to Businesses
 - Burger King
 - Summit Plaza
 - Middletown Chevy
 - Nu-Car Connection
 - Middletown Medical Professional Bldg
 - Ciamaricone's Landscaping
 - Tri State Materials
 - Coober Wilbert Valut Company
 - Mr. Mulch
 - Guardian Fence Company
 - Rollins Metal Works
 - Body Shop
 - 301 Cycle
 - Shops of Mt. Pleasant

- Total Takes of Businesses
 - Ringold Chapel AME
 - Logullo's Country Market
 - M. Madic, Inc.
 - KO's Cleaning
- Partial Impacts to Homes
 - 3 plus impacts to:
 - · Middletown Village
 - Springmill
- Total Takes of Homes 9
- Plus impacts to additional vacant or farmed residential/commercial properties

Note: Option B has been aligned to avoid three potential Section 4(f) impacts (historic resources), i.e. R.G. Hayes House, Armstrong Walker House, and Mt. Pleasant Farm.



Option B: Eliminate Spur Road Improve Existing US 301

Need to Improve Sharp Curve

 Under Option B, it would still be necessary to address the sharp curve at the southern end of Summit Bridge, including the removal of the existing intersection on that curve.

Cost to Improve Sharp Curve • The improvement would

 The improvement would involve the provision of a "Y" type grade separation carrying Bethel Church Road over SR 896, south of Summit Bridge at a cost of approximately \$12 to \$18 million.



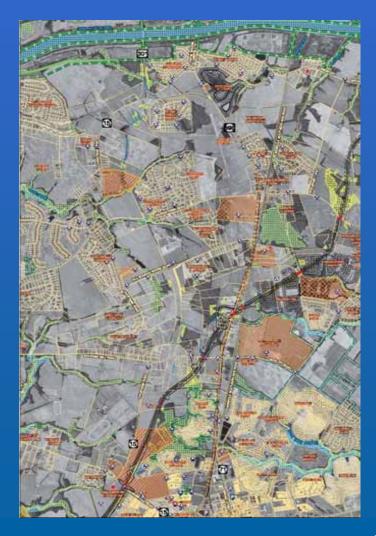


Option B: Eliminate Spur Road **Improve Existing US 301**

- Reduced Cost and Benefits
 Therefore, the total cost of Option
 B (\$67 to \$83 million) would be
 about two-thirds of the cost of the recommended Spur Road (\$105 to \$120 million), but would NOT
 - Provide a limited access roadway, with its inherent safety benefits
 - > Manage truck traffic due to mixing of truck traffic due to mixing of truck traffic with local traffic from the proposed interchange between new/existing US 301, north of Armstrong Corner Road, to Summit Bridge, including through the US 301/SR 896 intersection at **Mount Pleasant**

Increased Accidents

In addition, increased traffic, congestion, and accidents would be anticipated on Choptank Road and existing US 301, compared to the recommended limited access Spur Road. (See Option A)





Option B: Eliminate Spur Road Improve Existing US 301

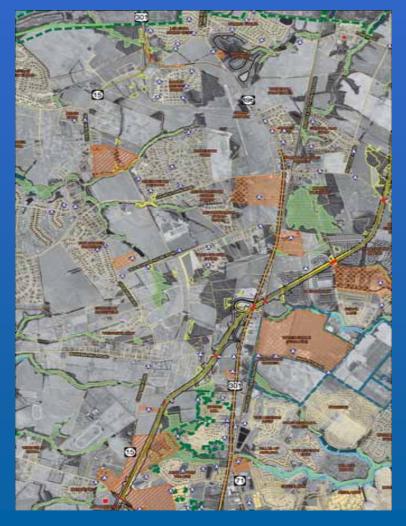
Reduced Costs / Reduced Benefits / Reduced Toll Revenues

- In addition to the traffic diversions to Choptank Road and existing US 301, there is a decrease of 2,300 vehicles per day passing through the mainline toll plaza near the Maryland/Delaware Line with the "No Spur" option.
- These vehicle would travel on other local roads, resulting in increased traffic on local roads and a reduction in anticipated toll revenues to fund the proposed US 301 improvements.



Option B: Eliminate Spur Road Improve Existing US 301

In summary, DelDOT does not consider Option B viable, since it does not fully achieve the project's Purpose & Need by not providing improved traffic operations (Choptank Road, existing US 301, etc.), managing truck traffic and providing improvements that address safety needs in the greater Middletown area.

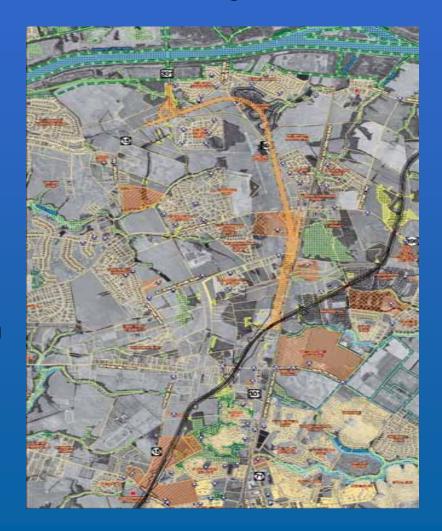




Option C: Provide a limited access Spur Road along existing US 301 from north of Armstrong Corner Road to Summit Bridge

Description

Provides a Y type interchange between new US 301 and the Spur Road. The Spur Road would extend north along the west side of existing US 301 to the vicinity of Summit Airport. The Spur Road would then cross existing US 301 extending north along the east side of existing US 301 and then curve west and north to Summit Bridge

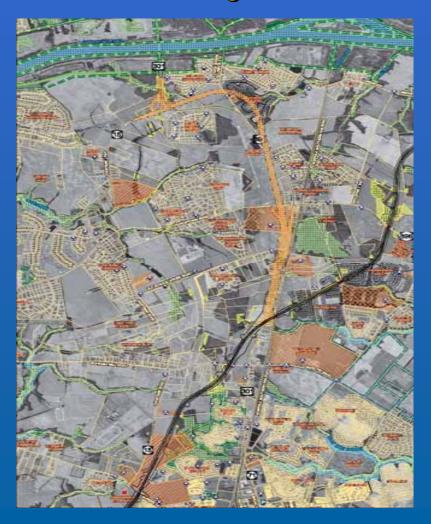




Option C: Provide a limited access Spur Road along existing US 301 from north of Armstrong Corner Road to Summit Bridge

Benefits

 Since Option C is a limited access facility, it would be expected to provide traffic and safety benefits similar to the recommended Spur Road.





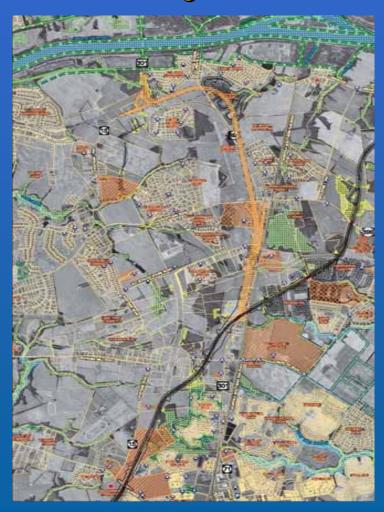
Option C: Provide a limited access Spur Road along existing US 301 from north of Armstrong Corner Road to Summit Bridge

Costs

- However, the costs associated with this Option would clearly exceed those of the recommended Spur Road.
- The cost to provide a limited access facility along existing US 301 from north of Armstrong Corner Road to Summit Bridge is approximately \$135 to \$165 million, which includes the need to provide service roads and interchanges for local access, in addition to a new limited access US 301.

Property Impacts

The impacts to properties along existing US 301 would be extraordinary, including potential impacts to national register eligible historic resources and Summit Airport, including their expansion plans.





Option C Property Impacts

- Partial Impacts to Businesses
 - Rollins Metal Works
 - Body Shop
 - 301 Cycle
 - Shops of Mt. Pleasant
 - Summit Airport

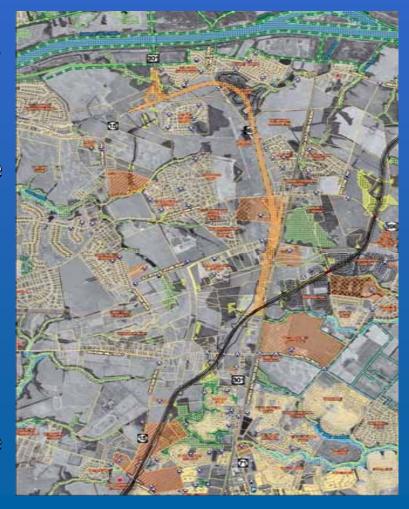
- Total Takes of Businesses
 - KO's Cleaning
 - Mr. Mulch
 - Guardian Fence Company
- Partial Impacts to Homes 9
- Total Takes of Homes 20
- Plus impacts to additional vacant or farmed residential/commercial properties

Note: Option C cannot avoid potential Section 4(f) impacts (historic resources) at Mt. Pleasant Farm, due to proximity of railroad.



Option C: Provide a limited access Spur Road along existing US 301 from north of Armstrong Corner Road to Summit Bridge

Benefits – Increased Costs In summary, while Option C does accommodate the basic goals and objectives of the US 301 **Project Development effort with** respect to traffic, safety, and the management of truck traffic, **DelDOT does** <u>not </u>consider Option C to be prudent, because of its costs, extraordinary property impacts, and environmental (cultural resource) impacts along existing US 301. The cost and property impacts of Option C substantially exceed those of the recommended Spur Road.





Responses to Coalition Questions

The following responses are provided to the Coalition questions, many having been addressed in the evaluation of the three options noted hereinbefore



Question No. 1:

Costs (in comparable 2005 \$) of upgrading Rt. 301/896 from Churchtown Rd. to the proposed interchange of the Green Route and Route 301 and costs associated with improvements to the Summit Bridge approach.

Response to Question No. 1:

The proposal to replace the Spur Road with improvement to existing US 301 requires widening existing US 301 from Peterson Road to Mount Pleasant and improving the curve south of Summit Bridge. Thus, these are the costs provided.

- The cost to widen US 301 from Peterson Road to Mount Pleasant (SR 896/Boyds Corner Road), required to meet traffic needs under the No Spur Road option, is approximately \$55 to \$65 million.
- The cost to improve the curve south of Summit Bridge is approximately \$12 to \$18 million.
- Therefore, the total cost of an alternative that provides improvements along existing US 301 (not limited access) is \$67 to \$83 million, as compared to \$105 to \$120 million for the recommended limited access/divided Spur Road.
- However, upgrading existing US 301 does not fully meet the project goals and objective (See Option B).



Question No. 2:

What would be the difference in cost to acquire ROW for the Spur (new acquisition) vs. land needed to upgrade existing 896/301?

Response to Question No. 2:

- The cost to acquire the right-of-way for the Spur Road is estimated to be \$15 to \$20 million.
- The cost of right-of-way to widen existing US 301 from Peterson Road to Mount Pleasant (Option B) would be expected to be approximately \$8 to \$12 million, less than that of the recommended Spur Road, approximately \$15 to \$20 million.
- The cost to acquire the right-of-way for a similar limited access facility along existing US 301 (Option C) would exceed that of the recommended Spur Road.



Question No. 3:

Cost associated with building the spur road, including improvements to the Summit Bridge approach, from the base of Summit Bridge to the proposed interchange with the Green Route (include purchase of ROW currently not owned by DelDOT).

Response to Question No. 3:

- The cost to construct the recommended Spur Road is approximately \$90 to \$100 million for construction and design and \$15 to \$20 million for right-of-way, for a total of \$105 to \$120 million.
- This cost includes improvements to the base of Summit Bridge, i.e. improving the curve and eliminating the existing intersection of Choptank Road/Bethel Church Road.
- The cost of building a similar limited access facility along existing US 301, Option C, (approximately \$135 to \$165 million) would exceed the cost of the recommended Spur Road (approximately \$105 to \$120 million).
- The cost of a lesser type facility, simply widening existing US 301 (approximately \$67 to \$83 million), would be less than that of the recommended Spur Road (approximately \$105 to \$120 million), but would not fully meet the goals and objectives of the US 301 Project Development effort (See Option B).



Question No. 4:

Estimate the need for, and additional costs of, associated improvements to Rt. 302 south of the proposed interchange of the Green Route & Route 301 (south along Route 301 to?). This assumes some improvements may be needed to accommodate some of the anticipated 6,000 CPD expected on the spur route.

Response to Question No. 4:

- The costs of improving existing US 301 to accommodate projected volumes (Peterson Road to Mount Pleasant) is approximately \$67 to \$83 million for Option B (not a limited access facility) and approximately \$135 to \$165 million for Option C (limited access facility, similar to recommended Spur Road).
- The Spur Road is projected to carry approximately 22,500 vehicles per day in the design year 2030.



Question No. 5:

Costs associated with making 896 a divided highway. Should this be considered under any scenario as a safety measure? Is it assumed that Route 896 will not need improving (expanding) in the future?

Response to Question No. 5:

- Existing US 301/SR 896 is currently two lanes in each direction from Boyds Corner Road (Mt. Pleasant) to Summit Bridge. Widening this section of roadway would not be necessary under the "No Spur Road" option from a capacity perspective.
- However, under the "No Spur Road" option, due to capacity and queuing problems, existing US 301 between Petersen Road and Boyds Corner Road would need to be widened from one to two lanes in each direction.
- Providing a median on existing US 301, similar to that of the Spur Road (62 ft), would provide a safer facility, yet not as safe as a limited access facility, and would bring the costs of Option B (approximately \$67 to \$83 million) even closer to that of the recommended Spur Road (approximately \$105 to \$120 million), without providing a limited access facility.



Question No. 6:

What improvements are already slated for improving Choptank RD, what is its final design volume?

Response to Question No. 6:

- DelDOT plans currently call for providing shoulders along Choptank Road, in addition to the construction of three roundabouts, as traffic calming measures.
- The Choptank Road Project was advertised for construction bids earlier this year. Bids were taken on 2/27/07, and the project awarded on 3/1/07 for a cost of \$11,592,526.84.



Question No. 7: What would the time frame be to upgrade 896/301 to accommodate future traffic as opposed to building the spur?

Response to Question No. 7:

- The timing of the new US 301 improvements is currently projected with an open to traffic date of between 2015 and 2020. These dates are subject to final approval of the project by the Federal Highway Administration, securing the necessary permits, completing final design, and of course, having the necessary available funding.
- The time frame to upgrade SR 896/US 301 to accommodate future traffic would be at some time before 2030, but likely after the construction of new US 301.
- The timing associated with upgrading US 301 would also likely depend on the availability of state and federal funding.
- In contrast, the vast majority of the funding required for a new US 301 + Spur Road is very likely to come from the sale of toll revenue bonds, supported by those using the facility.
- It is unlikely that toll revenues from the new US 301 Project could be used to upgrade existing US 301.



Question No. 8:

What is the impact to homes (how many are directly impacted) utilizing an increased capacity on 896? How does this compare to the spur?

Response to Question No. 8:

- The Spur Road does not require taking any homes.
- Impacts resulting from conversion of existing US 301 to a limited access facility (Option C), similar to the proposed Spur Road, or to lesser upgrades (Option B) would both result in significant takings along existing US 301, portions of which are highly developed. (See slides 15 and 23)
- The specific property impacts would depend upon the degree of access permitted or provided along existing US 301 and the actual details of the widening.
- Preliminary property impacts for Options B and C are shown on the following two slides.



Question No. 9:

How do changes in future land use of the area (more compact growth in central core, less in northwestern quadrant per NCC Comprehensive Plan) impact expected traffic patterns, specifically the need for improvements to existing roadways (e.g. Route 301) and the expected local use of the spur? (l.e. will improvements be essential for Rt. 301 anyway?)

Response to Question No. 9:

- DelDOT traffic projections are based on the latest population and employment projections from the Population Consortium at the University of Delaware.
- The Population Consortium takes into account the New Castle County Land Use Plans, in developing their projections.
- Under federal guidelines and regulations, and in order to retain the option to use federal funds on a project, DelDOT must use these projections during project development and preparation of the appropriate project environmental documents.



Question No. 10:

With other projects in the tri state area at a maximum dBA level of 47 dBA, why is the sound level for the spur road estimated at 67 dBA. We feel it is not acceptable at that level. What will be done to lower that dBA level to no less than 55 dBA.

Response to Question No. 10:

 Noise analysis for the US 301 project follows the national requirements of the Federal Highway Administration (FHWA) and the DelDOT Noise Policy, which utilize 67dBA for sensitive receptors such as those in the project area, i.e. residences, schools, churches, libraries, hospitals, picnic areas, recreation areas, playgrounds, active sports areas and parks. (see the handout/Noise Analysis Display from the January 8 and 9, 2007 Public Hearing for information regarding FHWA and DelDOT noise policies).

Note: A visual berm is proposed between the Chesapeake Meadow and the Spur Road.



Design Noise Levels

The Federal Highway Administration Design Noise Levels are as follows:

Activity Category	Design Noise Level Leq (dBA)	Description of Activity Category
A	57 dBA (Exterior)	Land on which serenity and quiet are of extraordinary significance and serve an important public need, and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
В	67 dBA (Exterior)	Residences, motels, hotels, schools, churches, libraries, hospitals, picnic areas, recreation areas, playgrounds, active sports areas, and parks.
С	72 dBA (Exterior)	Developed lands, properties or activities not included in categories A and B above.
D		Undeveloped lands.
E	52 dBA (Interior)	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals and auditoriums.



Noise Mitigation

DelDOT considers noise mitigation when either of the following conditions is satisfied:

- Predicted design-year noise levels exceed existing noise levels by 10 dBA or greater, regardless of overall noise level.
- Predicted design-year noise levels approach or exceed the Noise Abatement Criteria levels shown in the table on the prior slide.
- For example, FHWA and DelDOT consider a noise impact to occur for Category B when the design-year noise level would be 66 dBA or greater.



Noise Analysis Procedures

- Identify Noise-Sensitive Land Uses
 Chesapeake Meadow
 - Chesapeake Meadow would fall in Activity Category B of the FHWA Noise Abatement Criteria.
- Determine Existing Noise Levels
 - Existing noise levels for both primary Chesapeake Meadow receptors CM-1 and CM-3 were measured at 47 dBA. Existing noise levels at the property lines along Fox Den Court/Churchtown Road were projected at 50 dBA. Current community noise levels are influenced mainly by local activity.





Noise Analysis Results – Chesapeake Meadow

Design-Year Noise Level Predictions

Year 2030 noise levels are predicted to increase from 5 to 13 dBA above existing noise levels in the west portion of Chesapeake Meadow. Receptor CM-3 is in the rear yards of the properties on the west side of the community, and shows the greatest predicted noise increases.

Chesapeake Meadow Noise Levels				
Primary Receptors	Address	Existing Loudest Hour Leq (dBA)	DY 2030 No-Build Leq (dBA)	DY 2030 Green-N Leq (dBA)
CM-1 (SW)	208 Deerfield Drive	(47)	(47)	52/48*
CM-3 (W)	26 Meadow Lane	(47)	(47)	60 /52*
	102 Fox Den Court	(50)	(54)	54/54
* without/with proposed 11' x 1600' visual earth berm				

Assess Noise Impacts

Year 2030 noise levels along the west row of residences, within Chesapeake Meadow, would exceed federal guidelines at eleven properties.

Year 2030 noise levels along the south row of residences (Fox Den Court), within Chesapeake Meadow, would not exceed federal guidelines, with the anticipated increase of 4dBA over existing noise levels, and no increase when compared to year 2030 No-Build.



Mitigation Measures

Mitigation Measures

- Various noise mitigation options were analyzed, but none was found to be costeffective, as defined under DelDOT's noise policy (approved by FHWA).
- However, DelDOT will provide a "visual" earthen berm between Chesapeake Meadow and the Spur Road, as part of the US 301 project.
- A visual berm 11' x 1600' would visually shield properties in the western portion of the community, and would prevent the noise impacts that would have occurred in this area.
- With a visual earth berm, 11 x 1600', the noise increases would be limited to 1 to 5 dBA.

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Note: +3dBA = "barely perceptible"
+5dBA = "recognizable" or noticeable"
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Question No. 11:

Please quantify the possible negative impacts (traffic failures?) of not building the spur in favor of making improvements to Route 301 per item #1.

Response to No. 11:

- The current daily traffic volume on existing US 301 is 23,000 and on Choptank Road north of Churchtown Road, it is 5,400.
- Without a new US 301, the volume on existing US 301 would nearly double to 43,500, while the volume on Choptank Road would quadruple to 22,500 by design year 2030.
- Construction of the Green North plus Spur Road Alternative would reduce the design year 2030 volumes on existing US 301 and Choptank Road to only slightly greater than today's volumes, i.e. 27,900 (2030) vs. 23,000 (today) and 6,200 (2030) vs. 5,400 (today), respectively.
- Without the Spur Road, the volume on existing US 301 would increase to 37,200, while the volumes on Choptank Road would more than double to 14,500.



Question No. 11 (Cont'd):

Please quantify the possible negative impacts (traffic failures?) of not building the spur in favor of making improvements to Route 301 per item #1.

Response to No. 11 (Cont'd):

- With the Green North Alternative, but without the Spur Road, the new Choptank Road/Churchtown Road Roundabout would be on the verge of failure. With the Spur Road, the roundabout would operate acceptably, below its capacity.
- Additionally, without the proposed Spur Road, the intersection of SR 71 and US 301 is
 projected to reach failure by 2030, and long queues are projected at the various other
 traffic signals along US 301, making it more difficult for motorists to enter or leave
 other mid-block driveways.
- Again, higher volumes of traffic on non-limited access facilities, such as Choptank
 Road and existing US 301, will result in greater congestion and higher accident rates
 on these roads. The mixing of through traffic, including high volumes of truck traffic
 with local traffic, on portions of existing US 301 would occur.



Question No. 12: What other alternatives have been considered to reduce traffic / improve conditions on Choptank Road?

Response to No. 12:

 No additional alternatives have been considered to reduce traffic/improve conditions on Choptank Road as part of the US 301 Project Development effort, since provision of the Spur Road would generally maintain current traffic volumes on an improved Choptank Road.



SUMMARY

- DelDOT believes providing the Spur Road as part of the Recommended Preferred Alternative fully meets the project's Purpose and Need by addressing traffic congestion and safety needs and the management of truck traffic, in a cost effective manner (majority of the costs to be borne by the tolls paid by the users of the facility).
- To provide a similar limited access facility along existing US 301 would be more costly with considerably greater property impacts.
- Providing less than a limited access facility would result in reduced costs, but would also result in significant property impacts along existing US 301, and would not fully meet the project's Purpose and Need, with respect to addressing traffic congestion, safety, and the management of truck traffic.
- In view of the above, the Department continues to consider the Spur Road as an integral part of the Green and Purple Alternatives.



Current Spur Road Concept – Chesapeake Meadow Community

DelDOT notes the following with respect to the proposed Spur Road in the vicinity of the Chesapeake Meadow community:

- The strip of property directly to the west of Chesapeake Meadow is owned by DelDOT. This parcel is approximately 2,200 feet in length and varies in width from 250 on the south end to 350 feet on the north end.
- The proposed US 301 Spur Road has been shifted to the west past Chesapeake Meadow, such
 that the proposed travel lanes actually fall outside of the DelDOT-owned right-of-way. This
 was done to ensure ample room for an earth berm, as well as to shift the roadway as far
 from Chesapeake Meadow as reaonably possible.
- As a result of this western shift, DelDOT needs to acquire an additional strip of property adjacent to the DelDOT-owned parcel approximately 2,220 feet long and 200 feet wide.
- An 11'x1,600' long earth berm is proposed along the Spur Road between the travel lanes and Chesapeake Meadow. Beyond the limit of disturbance (LOD) of the earth berm, approximately 150-175 feet of additional open space would remain to the nearest property line at Chesapeake Meadow.



Path Forward / Schedule - 2007

• May – July 2007:

- Prepare Design Study Report addressing all substantive comments
- Final Environmental Impact Statement (FEIS) developed, including DEIS comment responses

• August 2007:

- FEIS submission to FHWA
- Public notification of FEIS availability

• Fall 2007:

- FHWA Approval / Record of Decision (ROD)
- Corps of Engineer's issuance of provisional permit



Funding Status

2007: Funds are available for effort necessary to gain Federal

approval of a selected alternative

DelDOT has requested General Assembly to authorize FY 2008

(July 2007 through June 2008) funding for detailed engineering

and to begin property acquisition to protect the selected

alignment

2008-2011: Design and right-of-way acquisition likely to require 4

years

2011-2015/2016: Construction if full funding is available and under ideal

conditions

2011-2021: Construction if limited funding requires phasing of

construction of the project over several years (similar to SR 1)

 DelDOT's projected average annual capital program for FY 2006 to FY 2012 is \$303 million (US 301 Project alone costs about \$600 million)

Toll Facility – Proposed to fund a significant portion of the cost of new US 301



NEXT STEPS

 Be assured that we will continue to work with the Middletown Corridor Coalition and the Chesapeake Meadow Community in an effort to minimize impacts from the Spur Road.